**PATENT** 

# MS188917.01/MSFTP304US

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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In repatent application of:

Applicants(s): Curtis G. Wong, et al.

Examiner:

Raymond J Bayerl

Serial No:

10/055,538

Art Unit:

2173

Filing Date:

January 23, 2002

Title: MEDIA AUTHORING AND PRESENTATION

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### APPEAL BRIEF

Dear Sir:

Appellants submits this brief in connection with an appeal of the above-identified patent application. A credit card payment form is filed concurrently herewith in connection with all fees due regarding this appeal brief. In the event any additional fees may be due and/or are not covered by the credit card, the Commissioner is authorized to charge such fees to Deposit Account No. 50-1063 [MSFTP304US].

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# I. Real Party in Interest (37 C.F.R. §41.37(c)(1)(i))

The real party in interest in the present appeal is Microsoft Corporation, the assignee of the present application.

# II. Related Appeals and Interferences (37 C.F.R. §41.37(c)(1)(ii))

Appellants, appellants' legal representative, and/or the assignee of the present application are not aware of any appeals or interferences which may be related to, will directly affect, or be directly affected by or have a bearing on the Board's decision in the pending appeal.

# III. Status of Claims (37 C.F.R. §41.37(c)(1)(iii))

Claims 11-14, 21-29, 41, 42 and 48-51 have been withdrawn. Claims 2 and 3 have been canceled. Claims 1, 4-10, 15-20, 30-40, 43-47, 52 and 53 stand rejected by the Examiner. The rejection of claims 1, 4-10, 15-20, 30-40, 43-47, 52 and 53 is being appealed.

# IV. Status of Amendments (37 C.F.R. §41.37(c)(1)(iv))

The Examiner has entered amendments submitted after the Final Office Action. (See Communication from Examiner, Advisory Action dated July 25, 2005, page 1).

# V. Summary of Claimed Subject Matter (37 C.F.R. §41.37(c)(1)(v))

### A. Independent Claim 1

Independent claim 1 recites, "A system that facilitates non-linear viewing of media, the system comprising: a scene selector that scans a digitized media and selects a scene in the digitized media based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user; a metadata generator that produces metadata associated with the selected scene and annotates the selected scene with the metadata; and an organizer that places the selected annotated scene in a media store to facilitate non-linear viewing of one or more scenes." (See e.g., FIG. 1; page 4, lines 16-24; page 7, lines 9-11).

#### B. Independent Claim 6

Independent claim 6 recites, "A method that facilitates non-linear viewing of media, comprising: selecting a scene from a set of digitized media based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user; annotating the selected scene with metadata; and storing the annotated scene to facilitate non-linear retrieval of the annotated scene." (See e.g., FIG. 2; page 6, line 26 – page 7 line 25).

### C. <u>Independent Claim 15</u>

Independent claim 15 recites, "A system for non-linear viewing of media, comprising: a scene retriever that retrieves one or more annotated scenes and one or more pieces of annotating metadata associated with the one or more annotated scenes from a media store; a metadata analyzer that analyzes the one or more pieces of annotating metadata to identify one or more relationships between the one or more pieces of annotating metadata; a playlist generator that evaluates the one or more relationships and produces a playlist of related scenes." (See e.g., FIG. 3; page 8, line 3 – page 9, line 27).

#### D. Independent Claim 30

Independent claim 30 recites, "A system for annotating video media, comprising: a media database comprising a playlist and one or more video segments, where the video segments are associated with an annotating metadata based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user; and an annotating tool that facilitates creating the annotating metadata based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user and annotated video segments by associating the annotating metadata with the video segments." (See e.g., FIG. 8; page 7, lines 9-11; page 15, line 11 – page 16, line 14).

#### E. <u>Independent Claim 35</u>

Independent claim 35 recites, "A system for delivering media content, the system comprising: a media data store comprising one or more metadata-annotated displayable items; a

presenter that presents a selected first displayable item from the media data store; and a selector that selects a second displayable item from the media data store based, at least in part, on a relationship between a first metadata associated with the first displayed item and a second metadata associated with the second displayable item." (See e.g., FIG. 9; page 16, line 15 – page 17, line 7).

#### F. Independent Claim 43

Independent claim 43 recites, "A data structure that facilitates non-linear viewing of media items, the data structure comprising: a first field that holds a media item; and a second field that holds a metadata item related to the media item, where the metadata facilitates locating a related media item by annotating the related media with metadata, and where the metadata facilitates at least one of identifying the media item." (See e.g., FIG. 12; page 19, lines 3-19; page 19, lines 13-19).

#### G. Independent Claim 44

Independent claim 44 recites, "In a computer system having a graphical user interface that comprises a display and a selection device, a method of providing and selecting from a set of graphical user interface elements on the display, the method comprising: retrieving a set of graphical user interface elements, each of the interface elements representing an action associated with facilitating the non-linear display of media items; displaying the set of interface elements on the display; receiving an interface element selection signal indicative of the selection device selecting a selected entry from the set of interface elements; and in response to the interface element selection signal, initiating processing of related media by the metadata generator and to facilitate non-linear viewing of media based, at least in part, upon stored metadata." (See e.g., FIG. 13, page 19, line 20 – page 20, line 21).

#### H. Independent Claim 45

Independent claim 45 recites, "A computer-readable medium having computer executable instructions for employing a data packet adapted to be transmitted between two or more computer components that facilitate annotating a media and facilitate the non-linear viewing of the media, the data packet comprising: a first field that stores a clip identifier that identifies a

portion of a media; a second field that stores a metadata key that identifies an annotating metadata associated with the clip identified by the clip identifier; and a third field that stores data associated with the clip identified by the clip identifier." (See e.g., FIG. 14; page 20, line 22 – page 22, line 2).

#### I. Independent Claim 46

Independent claim 46 recites, "A computer-readable medium having computer executable instructions for employing a memory for storing data for access by a computer component, the memory comprising: a data structure stored in the memory, the data structure holding: a first field that stores a clip identifier that identifies a portion of a media; a second field that stores a metadata key that identifies an annotating metadata associated with the clip identified by the clip identifier; and a third field that stores data associated with the clip identified by the clip identifier." (See e.g., FIG. 14; page 20, line 22 – page 22, line 2).

#### J. Independent Claim 47

Independent claim 47 recites, "A computer-readable medium having computer executable instructions for employing a data packet adapted to be transmitted between two or more computer components that facilitate the non-linear viewing of a media, the data packet comprising: a first field that stores a clip identifier that identifies a portion of a media; a second field that stores a requested user action concerning the portion identified by the clip identifier; and a third field that stores metadata associated with the portion identified by the clip identifier, where the metadata is employed to adapt one or more clips according to the requested user action." (See e.g., FIG. 14; page 20, line 22 – page 22, line 2).

## VI. Grounds of Rejection to be Reviewed (37 C.F.R. §41.37(c)(1)(vi))

- A. Whether claims 45-47 are unpatentable under 35 U.S.C. §101.
- **B.** Whether claims 1-6, 8-10, 43, 44, 52 and 53 are unpatentable under 35 U.S.C. §102(e) over Jain, et al. (U.S. 6,567,980).

- C. Whether claims 45-47 are unpatentable under 35 U.S.C. §102(e) over Morris (U.S. Patent Application: 2002/0088000).
- **D.** Whether claim 7 is unpatentable under 35 U.S.C. §103(a) over Jain, et al. (U.S. 6,567,980) in view of Duncombe (U.S. 6,813,745).
- E. Whether claims 15-20 and 30-40 are unpatentable under 35 U.S.C. §103(a) over Jain, et al. in view of Duncombe (U.S. 6,792,573).

#### VII. Argument (37 C.F.R. §41.37(c)(1)(vii))

#### A. Rejection of Claims 45-47 Under 35 U.S.C. §101

Claims 45-47 stand rejected under 35 U.S.C. §101. It is respectfully submitted that this rejection is improper and should be reversed for at least the following reasons. The subject claims produce a useful, concrete, and tangible result and fall within a statutory class for inventions.

Patentable subject matter is not limited to tangible articles or objects, but includes intangible subject matter, such as data or signals, representative of or constituting physical activity or objects. In re Warmerdam, 33 F.3d 1354, 1360, 31 U.S.P.Q.2D (BNA) 1754, 1760 (Fed. Cir. 1994) (citing In re Schrader, 22 F.3d 290, 295 (Fed. Cir. 1994) (emphasis added). Title 35, section 101, explains that an invention includes "any new and useful process, machine, manufacture or composition of matter."... Without question, software code alone qualifies as an invention eligible for patenting under these categories, at least as processes. Eolas Techs., Inc. v. Microsoft Corp., 399 F.3d 1325, 1338-39 (Fed. Cir. 2005) (emphasis added).

Independent claims 45-47 recite, "A computer-readable medium having computer executable instructions". The Examiner incorrectly argues at page 2 of the Advisory Action that one possible embodiment of the computer-readable medium is a "carrier wave" (e.g., a signal), and therefore the claims are non-statutory. Appellants' representative respectfully submits that signal claims are within the provinces of statutory subject matter. See In re Warmerdam, supra.

Moreover, the recited computer executable instructions are <u>software code</u>. Pursuant to *Eolas Techs.*, *Inc. v. Microsoft Corp.*, software code <u>alone</u> qualifies as an invention eligible for patenting, even if intangible (e.g., manifested without physical or structural components). Accordingly, this rejection of claims 45-47 should be reversed.

### B. Rejection of Claims 1-6, 8-10, 43, 44, 52 and 53 Under 35 U.S.C. §102(e)

Claims 1-6, 8-10, 43, 44, 52 and 53 stand rejected under 35 U.S.C. §102(e) as being anticipated by Jain, et al. (U.S. 6,567,980). Reversal of this rejection is respectfully requested for at least the following reasons. Jain, et al. fails to teach or suggest each and every limitation as recited in the subject claims.

A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. Trintec Industries, Inc., v. Top-U.S.A. Corp., 295 F.3d 1292, 63 U.S.P.Q.2D 1597 (Fed. Cir. 2002); See Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). The identical invention must be shown in as complete detail as is contained in the ... claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

#### Independent Claims 1 and 6

The claimed invention relates to viewing annotated digital media and non-linear viewing of related annotated media. In particular, independent claim 1 (and similarly independent claim 6) recites, "a metadata generator that produces metadata associated with the selected scene and annotates the selected scene with the metadata; and an organizer that places the selected annotated scene in a media store to facilitate non-linear viewing of one or more scenes". Jain, et al. does not disclose or suggest these novel aspects of appellants' claimed invention.

Rather, Jain, et al. discloses a multimedia cataloger that extracts metadata from video (see col. 2, lines 18-20), and commits the metadata to the Metadata Track Index Manager and/or a track index (see col. 8, lines 54-59; col. 9, lines 11-12). Jain, et al. neither annotates digital media with metadata, nor stores annotated media as recited in the subject claims. Instead, the reference extracts metadata from the media, and stores that metadata separately from the media.

(See e.g., Fig. 1, items 130, 140). Consequently, the non-linear access to various segments of the media requires an intermediate index and is therefore distinct from the subject invention.

At page 2 of the Advisory Action, the Examiner incorrectly asserts that extracting metadata from media is equivalent to annotating the media with metadata. It is readily apparent that media directly annotated with metadata (i.e., annotated media) is distinct from unannotated media that has an associated index of associated metadata. For example, it is cumbersome to store media and metadata separately and also inefficient to consult an intermediary to provide non-linear access, when, as provided for in the subject invention, annotated media combines the media with the metadata for manageable storage and for rapid non-linear access. Jain, et al. does not teach or suggest "a metadata generator that produces metadata associated with the selected scene and annotates the selected scene with the metadata; and an organizer that places the selected annotated scene in a media store to facilitate non-linear viewing of one or more scenes". Accordingly, Jain, et al. fails to teach or suggest the identical invention in as complete detail as is contained in the subject claims, and this rejection should be reversed.

#### Independent Claims 43 and 44

Independent claim 43 recites, "a second field that holds a metadata item related to the media item, where the metadata facilitates locating a related media item by annotating the related media with metadata". Independent claim 44 recites, "in response to the interface element selection signal, initiating processing of related media by the metadata generator to facilitate non-linear viewing of media based, at least in part, upon stored metadata", wherein the metadata generator as described by the disclosure annotates media with metadata. (See page 4, lines 16-18). As detailed, supra, Jain, et al. does not provide for annotating the related media with metadata, and merely extracting metadata that is associated with the media is insufficient to read upon the claimed invention. Accordingly, reversal of this rejection with respect to independent claims 1, 6, 43, and 44, as well as all claims that depend there from, is respectfully requested.

### C. Rejection of Claims 45-47 Under 35 U.S.C. §102(e)

Claims 45-47 stand rejected under 35 U.S.C. §102(e) as being anticipated by Morris (U.S. Patent Application: 2002/0088000). Reversal of this rejection is respectfully requested for at least the following reasons. Morris fails to teach or suggest each and every limitation set forth in the subject claims.

Independent claims 45 and 46 recite, "a second field that stores a metadata key that identifies an annotating metadata associated with the clip identified by the clip identifier." Independent claim 47 recites, "a second field that stores a requested user action ... and a third field that stores metadata...where the metadata is employed to adapt one or more clips according to the requested user action." Morris does not disclose or suggest these limitations.

Rather, Morris relates to a method and system for controlling access to image metadata. Digital images captured and stored on an internal memory of a digital camera can be uploaded to a database for storing the images [and the metadata]. (See Paragraphs 0017-0018). This metadata is stored within the image file in individual image tags. (See Fig. 2, item 60; paragraph 0020). The tags include system tags that describe such things as focus setting, aperture setting, etc. (see Fig. 3, item 64; paragraph 0021), and user tags that are used to store labels such as "birthday" or "vacation" (See Fig. 3, item 66; paragraph 0022). Morris is directed toward providing access to metadata (see e.g., paragraph 0005, "Friends and family may then access the photo website and not only see the pictures, but read and/or hear the story and history behind each image by accessing the metadata."), but is silent on whether the user actions (as opposed to descriptive labels) are stored within the metadata, and also silent on whether metadata can be employed to adapt a clip. Accordingly, contrary to the Examiner's contention, user tags neither store a requested user action, nor are the metadata employed to adapt one or more clips according to the requested user action, as recited in the subject claims. Rather, the reference stores only labels, and these labels are merely descriptive, without any functional ability disclosed, let alone the ability to adapt a clip according to a user action.

Furthermore, the data structure of Morris stores actual metadata, not a metadata key, as recited in independent claims 45 and 46. Morris does not teach or suggest a metadata key. Rather, Morris discloses an unsophisticated method of storing individual image files and is silent on whether metadata for one image can relate to other metadata (e.g., metadata in the same or a different image). Therefore, contrary to the Examiner's remarks at page 13 of the Final Office

Action (dated June 1, 2005); "identification of metadata" is insufficient to read upon a metadata key. For example, a key has dynamic, relational aspects with other data elements. The simplistic disclosure of the reference (e.g., that metadata can be stored in fields) does not contemplate the use of metadata keys, and, hence, does not anticipate the subject claims. Accordingly, this rejection of independent claims 45-47 should be reversed.

#### D. Rejection of Claim 7 Under 35 U.S.C. §103(a)

Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Jain, et al. (U.S. 6,567,980) in view of Duncombe (U.S. 6,813,745). Reversal of this rejection is respectfully requested for at least the following reasons. Claim 7 depends directly from independent claim 6, and Duncombe, which relates to a media system for storing media files and a media organization file, does not make up for the aforementioned deficiencies of Jain, et al. with respect to claim 6. Accordingly, this rejection should be reversed.

### E. Rejection of Claims 15-20 and 30-40 Under 35 U.S.C. §103(a)

Claims 15-20 and 30-40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jain, et al. in view of Duncombe (U.S. 6,792,573). Reversal of this rejection is respectfully requested for at least the following reasons. Jain, et al., alone and/or in combination with Duncombe, does not teach or suggest all limitations set forth in the subject claims.

To reject claims in an application under §103, an examiner must establish a prima facie case of obviousness. A prima facie case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on the Applicants' disclosure. See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Appellants' claimed invention further relates to annotating digital media with metadata to facilitate non-linear viewing of related scenes that are annotated with metadata. In particular, independent claim 15 (and similarly independent claims 30 and 35) recites, "a scene retriever that retrieves one or more annotated scenes" and "a playlist generator that evaluates the one or more relationships and produces a playlist of related scenes". The Examiner concedes that Jain, et al. does not teach or suggest every limitation, but contends that Duncombe will cure the deficiencies.

However, as detailed above, independent claims 15, 30 and 35 recite limitations similar to independent claim 1, which are not disclosed or suggested by Jain, et al. In particular, the instant claims recite annotated media (e.g., scenes, video segments, and displayable items). Jain, et al. does not teach annotated media, and Duncombe does not make up for this deficiency. Accordingly, the aforementioned claims as well as all associated dependent claims are therefore believed to be allowable over the cited references.

Duncombe relates to a method for playing media based upon feedback from a user, and discloses the goal seeking engine first selects, from the media clips, only those that are associated with the topic that matches the desired topic; and, secondly, selects only those media clips with matching complexity ratings, order ratings, and/or time length. (See col. 8, lines 22-60). Hence, the goal seeking engine requires at least two user inputs in order to locate relevant data (see col. 4, lines 53-54) and create or modify a list. Duncombe "organizes data by treating it like a four-dimensional object" (see col. 4, lines 19-20), but metadata is not contemplated by the reference. Therefore, relationships between metadata are not utilized to index the clips automatically, rather, the clips are organized by a "professional" (see col. 2, lines 60-64), and can be later reorganized based upon user ratings (see col. 2, lines 54-56) of predetermined categories. In essence, Duncombe selects media clips based upon relationships between the media as defined by a professional and/or users who have previously viewed the clip. Duncombe does not choose clips based upon relationships between one or more pieces of annotating metadata.

At pages 8-9, the Final Office Action concedes that Jain, et al. does not teach or suggest "a playlist generator that evaluates the one or more relationships and produces a playlist of related scenes" (wherein the relationships are between the one or more pieces of annotating metadata), but contends that Duncombe will alleviate this insufficiency when combined with Jain, et al. However, "a playlist generator" from Duncombe the Examiner seeks to incorporate

into Jain, et al. does not evaluate relationships between <u>metadata</u>, but instead evaluates based upon categorical ratings provided by a professional. Therefore, the proposed combination does not teach or suggest all the claim limitations.

The Examiner further argues at page 14 of the Final Office Action that "a playlist generator" from Duncombe would then use metadata provided by Jain, et al. instead of using a professionally-organized and user-updated method to function as the disclosure teaches. In essence, the Examiner is not combining Jain, et al. with a playlist generator from Duncombe, but instead with a hypothetical playlist generator that works in the manner the Examiner desires in order to reject the subject claims. For example, Jain, et al. does not disclose a playlist generator (as the Examiner concedes), thus, the reference cannot teach or suggest a playlist generator that evaluates the one or more relationships (between the annotating metadata). Duncombe teaches a playlist generator, but not one that evaluates the one or more relationships (between metadata). Accordingly, neither reference teaches a playlist generator that evaluates the one or more relationships (between metadata), yet the Examiner, has taken the concept of a playlist generator, and given it attributes that neither reference discloses. In particular, the Examiner suggests a playlist generator from Duncombe would then use metadata provided by Jain, et al., ostensibly because Jain, et al. discloses the use of metadata in connection with other features.

Assuming arguendo that Jain et al. evaluates relationships between metadata, the reference does not teach or suggest doing so in connection with a playlist generator. It is not enough to simply postulate that the combination could be made, and would then work in the manner the Examiner desires simply because other aspects of the combined device provide for such flexibility. See In re Fritch, 972 F.2d 1260, 1265-66 (Fed. Cir. 1992) (holding that flexibility shown in one aspect of the reference does not imply extending that flexibility to the entire device). The Examiner has failed to make a prima facie case for obviousness and this rejection of independent claims 15, 30, and 35, as well as all claims that depend there from, should be reversed.

10/055,538

## MS188917.01/MSFTP304US

### F. Conclusion

For at least the above reasons, the claims currently under consideration are believed to be patentable over the cited references. Accordingly, it is respectfully requested that the rejections of claims 1, 4-10, 15-20, 30-40, 43-47, 52 and 53 be reversed.

If any additional fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP304US].

Respectfully submitted, AMIN & TUROCY, LLP

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### VIII. Claims Appendix (37 C.F.R. §41.37(c)(1)(viii))

- 1. A system that facilitates non-linear viewing of media, the system comprising:
- a scene selector that scans a digitized media and selects a scene in the digitized media based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user;

a metadata generator that produces metadata associated with the selected scene and annotates the selected scene with the metadata; and

an organizer that places the selected annotated scene in a media store to facilitate nonlinear viewing of one or more scenes.

- 2. (Canceled)
- 3. (Canceled)
- 4. The system of claim 1, where at least one of the face recognition, item recognition, voice recognition, color recognition, mood recognition and theme recognition is adapted by a machine learning technique based, at least in part, on the input from the user.
- 5. The system of claim 1, where the metadata generator produces at least one of, a date, a time, a length, a subject, a mood, a theme, a color, a person name, a set of person names, an item name and a set of item names associated with the scene.
- 6. A method that facilitates non-linear viewing of media, comprising:

selecting a scene from a set of digitized media based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user;

annotating the selected scene with metadata; and storing the annotated scene to facilitate non-linear retrieval of the annotated scene.

related scenes.

### MS188917.01/MSFTP304US

7. The method of claim 6, where selecting the scene from the set of digitized media comprises:

manually scanning one or more scenes from the set of digitized media; and manually selecting the scene.

8. The method of claim 6, where selecting the scene from the set of digitized media comprises:

automatically scanning one or more scenes from the set of digitized media; and automatically selecting the scene based on at least one of face recognition, item recognition, voice recognition, color recognition, mood recognition and theme recognition.

- 9. The method of claim 6, where annotating the selected scene with metadata comprises associating at least one of, a date, a time, a length, a subject, a mood, a theme, a color, a person, a set of people, an item and a set of items with the selected scene.
- 10. The method of claim 6, where storing the annotated scene to facilitate non-linear retrieval of the annotated scene comprises storing the annotated scene in at least one of, a database and a datacube.
- 11. A system for generating a playlist of media items to facilitate non-linear viewing of the media items, comprising:
- a scene retriever that retrieves one or more scenes and one or more pieces of annotating metadata associated with the one or more scenes from a media store;
- a metadata analyzer that analyzes the one or more pieces of annotating metadata to identify one or more relationships between the one or more pieces of annotating metadata; and a playlist generator that evaluates the one or more relationships and produces a playlist of
- 12. The system of claim 11, where the scene retriever retrieves a scene based, at least in part, on a value stored in the one or more pieces of annotating metadata.

and

### MS188917.01/MSFTP304US

- 13. The system of claim 12, where the metadata analyzer computes one or more similarity values for the one or more relationships.
- 14. The system of claim 13, where the playlist generator produces the playlist of related scenes based, at least in part, on the similarity values.
- 15. A system for non-linear viewing of media, comprising:

a scene retriever that retrieves one or more annotated scenes and one or more pieces of annotating metadata associated with the one or more annotated scenes from a media store;

a metadata analyzer that analyzes the one or more pieces of annotating metadata to identify one or more relationships between the one or more pieces of annotating metadata;

a playlist generator that evaluates the one or more relationships and produces a playlist of related scenes.

one or more viewers for viewing a scene listed in the playlist; one or more feedback receivers for receiving a feedback concerning the viewed scene;

a playlist updater for updating the playlist based, at least in part, on the feedback.

- 16. The system of claim 15, where the one or more viewers comprise at least one of, an active device and a passive device.
- 17. The system of claim 15, where the one or more viewers comprise at least one of, an intelligent device and a non-intelligent device.
- 18. The system of claim 15, where the feedback comprises at least one of, a touch input, a typed input, a mouse input, a voice input and a facial expression input concerning the viewed scene.

- 19. The system of claim 18, where the feedback concerns a current scene and where the feedback comprises at least one of, a command to skip ahead in the playlist, a command to skip back in the playlist, a command to generate a new playlist, a command to find scenes similar to the current scene and a command to play a longer scene related to the current scene.
- 20. The system of claim 15, where the playlist updater adds and/or removes a scene from the playlist based on at least one of, a usage data, a feedback command and a time stamp.
- 21. A method for facilitating non-linear viewing of media, comprising: selecting one or more stored scenes to view; analyzing one or more first metadata associated with the one or more selected scenes; and generating a playlist of stored scenes by evaluating one or more relationships between the one or more first metadata and one or more second metadata.
- 22. The method of claim 21 where selecting one or more stored scenes to view comprises at least one of, selecting a scene based on the presence of a face in the scene, selecting a scene based on the absence of a face in the scene, selecting a scene based on the presence of an item in the scene, selecting a scene based on the absence of an item in the scene, selecting a scene based on a voice in the scene, selecting a scene based on the absence of a voice in the scene, selecting a scene based on a mood of the scene and selecting a scene based on the theme of the scene.
- 23. The method of claim 22 where analyzing the one or more first metadata comprises computing one or more similarity scores for one or more pieces of metadata that hold information concerning at least one of a present face, a present item, a present voice, a mood and a theme.
- 24. The method of claim 23 where generating the playlist comprises placing one or more scene identifiers in the playlist.

25. A method for non-linear viewing of media, comprising:

displaying a scene stored in a playlist storing at least one scene and metadata associated with the scene;

receiving a user feedback related to the displayed scene;

reacting to the user feedback; and

if the user feedback commands an update to the playlist, selectively updating the playlist based, at least in part, on the user feedback.

- 26. The method of claim 25, where receiving the user feedback comprises receiving at least one of, a touch input, a typed input, a mouse input, a voice input and a facial expression input.
- 27. The method of claim 25, where reacting to the user feedback comprises at least one of, moving forward in the playlist, moving backward in the playlist, and displaying a media item related to the scene.
- 28. The method of claim 25, where updating the playlist comprises at least one of, adding a scene to the playlist and removing a scene from the playlist.
- 29. A method for facilitating non-linear viewing of media, comprising: receiving feedback related to a viewed media scene;

if the feedback requests finding related scenes, finding related scenes by analyzing a metadata associated with the viewed scene;

if the feedback requests generating a new playlist of media scenes, calling a method for generating a new playlist; and

if the feedback requests navigating within a playlist, selectively skipping forward and/or backward in the playlist according to the feedback.

A system for annotating video media, comprising:

a media database comprising a playlist and one or more video segments, where the video segments are associated with an annotating metadata based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user; and

an annotating tool that facilitates creating the annotating metadata based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user and annotated video segments by associating the annotating metadata with the video segments.

- 31. The system of claim 30, where the annotating metadata comprises at least one of, a date identifier, a time identifier, a videographer identifier, a face identifier, an item identifier, a voice identifier, a mood identifier and a theme identifier.
- 32. The system of claim 30, where the annotating tool generates the annotating metadata in response to a user input.
- 33. The system of claim 30, where the annotating tool automatically generates the annotating metadata based, at least in part, on a face recognition, an item recognition data, a voice recognition data, a mood data and a theme data.
- 34. The system of claim 33, where the annotating tool is adapted based on a machine learning technique based, at least in part, on a user input concerning the annotating metadata generated by the annotating tool.
- 35. A system for delivering media content, the system comprising: a media data store comprising one or more metadata-annotated displayable items; a presenter that presents a selected first displayable item from the media data store; and a selector that selects a second displayable item from the media data store based, at least in part, on a relationship between a first metadata associated with the first displayed item and a second metadata associated with the second displayable item.

- 36. The system of claim 35, where the media data store is at least one of a database, a data cube, a list, an array, a tree and a file.
- 37. The system of claim 35, where the presenter is at least one of an intelligent display and a non-intelligent display.
- 38. The system of claim 35, where the presenter is at least one of an active display and a passive display.
- 39. The system of claim 35, where the selector selects a second displayable item based, at least in part, in response to a user response to the first displayable item.
- 40. The system of claim 39, where the user response is at least one of, a spoken word, a keystroke, a mouse click, and a facial expression.
- 41. A media annotation and retrieval system, comprising:
- an annotator that annotates a set of media items with a metadata to facilitate retrieving media items related by the metadata;
- a playlist generator that generates a playlist of media items related by a first metadata retrieved in response to a first query;
- a presenter for presenting media items associated with the media item playlist; and a playlist updater that updates the playlist based on a second metadata retrieved in response to a second query, where the second metadata is related to the first metadata.

42. A method for annotating and retrieving media items, comprising:

annotating a set of media items with a metadata to facilitate metadata based retrieval of one or more of the set of media items;

receiving a first query related to identifying a media item by a relationship between the media item and a metadata;

retrieving a first metadata responsive to the first query;

generating a playlist of related media items where the media items are related by one or more metadata items in the first metadata;

displaying one or more media items listed in the playlist;

receiving a second query related to identifying a media item by a relationship between the media item and a metadata;

retrieving a second metadata responsive to the second query; and updating the playlist based on the second metadata.

- 43. A data structure that facilitates non-linear viewing of media items, the data structure comprising:
  - a first field that holds a media item; and
- a second field that holds a metadata item related to the media item, where the metadata facilitates locating a related media item by annotating the related media with metadata, and where the metadata facilitates at least one of identifying the media item.

44. In a computer system having a graphical user interface that comprises a display and a selection device, a method of providing and selecting from a set of graphical user interface elements on the display, the method comprising:

retrieving a set of graphical user interface elements, each of the interface elements representing an action associated with facilitating the non-linear display of media items;

displaying the set of interface elements on the display;

receiving an interface element selection signal indicative of the selection device selecting a selected entry from the set of interface elements; and

in response to the interface element selection signal, initiating processing of related media by the metadata generator and to facilitate non-linear viewing of media based, at least in part, upon stored metadata.

- 45. A computer-readable medium having computer executable instructions for employing a data packet adapted to be transmitted between two or more computer components that facilitate annotating a media and facilitate the non-linear viewing of the media, the data packet comprising:
  - a first field that stores a clip identifier that identifies a portion of a media;
- a second field that stores a metadata key that identifies an annotating metadata associated with the clip identified by the clip identifier; and
  - a third field that stores data associated with the clip identified by the clip identifier.
- 46. A computer-readable medium having computer executable instructions for employing a memory for storing data for access by a computer component, the memory comprising:
  - a data structure stored in the memory, the data structure holding:
    - a first field that stores a clip identifier that identifies a portion of a media;
  - a second field that stores a metadata key that identifies an annotating metadata associated with the clip identified by the clip identifier; and
  - a third field that stores data associated with the clip identified by the clip identifier.

- 47. A computer-readable medium having computer executable instructions for employing a data packet adapted to be transmitted between two or more computer components that facilitate the non-linear viewing of a media, the data packet comprising:
  - a first field that stores a clip identifier that identifies a portion of a media;
- a second field that stores a requested user action concerning the portion identified by the clip identifier; and
- a third field that stores metadata associated with the portion identified by the clip identifier, where the metadata is employed to adapt one or more clips according to the requested user action.
- 48. A set of application program interfaces embodied on a computer-readable medium for execution on a computer component in conjunction with a system for annotating and viewing media, comprising:
  - a first interface that receives media information;
  - a second interface that receives annotation information associated with the media; and
- a third interface that receives user interface information associated with the order in which media will be displayed.
- 49. A system for user-directed viewing of video, comprising: means for partitioning a first video into one or more second videos; means for displaying the one or more second videos; and means for annotating the one or more second videos to facilitate retrieving at least one of the first video and the one or more of the second videos in response to a user input.

50. A computer readable medium storing computer executable components of a system for media annotation and retrieval, comprising:

an annotating component that annotates a set of media items with a metadata to facilitate retrieving media items related by the metadata;

a playlist generating component that generates a playlist of media items related by a first metadata retrieved in response to a first query;

a presenting component for presenting media items associated with the media item playlist; and

a playlist updating component that updates the playlist based on a second metadata retrieved in response to a second query, where the second metadata is related to the first metadata.

51. A computer readable medium storing computer executable instructions operable to perform a method for annotating and retrieving media items, comprising:

annotating a set of media items with a metadata to facilitate metadata based retrieval of one or more of the set of media items;

receiving a first query related to identifying a media item by a relationship between the media item and a metadata;

retrieving a first metadata responsive to the first query;

generating a playlist of related media items where the media items are related by one or more metadata items in the first metadata;

displaying one or more media items listed in the playlist;

receiving a second query related to identifying a media item by a relationship between the media item and a metadata;

retrieving a second metadata responsive to the second query; and updating the playlist based on the second metadata

- 52. The data structure of claim 43, the metadata further facilitates identifying the media item.
- 53. The data structure of claim 43, the metadata further facilitates locating the media item.

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IX. Evidence Appendix (37 C.F.R. §41.37(c)(1)(ix))

None.

X. Related Proceedings Appendix (37 C.F.R. §41.37(c)(1)(x))

None.